



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

April 25, 2019

Sherri Gray  
Authorized Representative  
Vital Solutions, LLC.  
P.O. Box 9932  
West Palm Beach, FL 33419

Subject: PRIA Label Amendment – Addition of new organisms and use directions  
Product Name: VITAL OXIDE  
EPA Registration Number: 82972-1  
Application Date: October 18, 2018  
Decision Number: 544852

Dear Ms. Gray:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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EPA Reg. No. 82972-1  
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with FIFRA section 6. If you have any questions, please contact Melanie Bolden by phone at (703) 347-0165, or via email at [Bolden.Melanie@epa.gov](mailto:Bolden.Melanie@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Fuller', with a long horizontal stroke extending to the right.

Demson Fuller, Product Manager 32  
Regulatory Management Branch II  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

Enclosure

# VITAL OXIDE®

## ACTIVE INGREDIENTS

Chlorine Dioxide.....	0.200%
Alkyl (60% C <sub>14</sub> , 30% C <sub>16</sub> , 5% C <sub>12</sub> , 5% C <sub>18</sub> ) dimethyl benzyl ammonium chloride .....	0.125%
Alkyl (68% C <sub>12</sub> , 32% C <sub>14</sub> ) dimethyl ethylbenzyl ammonium chloride .....	0.125%
OTHER INGREDIENTS.....	99.550%
Total .....	100.000%

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: (optional text)

**ACCEPTED**

**04/25/2019**

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 82972-1

**FIRST AID: If in eyes:** Hold eye open and rinse slowly with water 15-20 mins. Remove contact lenses after first 5 mins. and continue rinsing. Call a Poison Control Center or doctor for treatment advice. Have product container or label with you when calling a poison control center or doctor, or going for treatment

**STORAGE AND DISPOSAL:** Store in original closed container in a cool, dry, place away from heat and open flame. Do not allow product to become overheated in storage. Avoid prolonged storage temperature above 40°C, 90°F. This may cause increased degradation of the product, which will decrease product effectiveness. Non-refillable -or- Refill only with this product. Do not reuse or refill this container unless the directions for use allow a different (concentrated) product to be diluted in the container. Container Disposal: Rinse and offer empty container for recycling. If recycling is not available, discard container in trash. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Discard excess or used (product) solution in drain with running water.

**To refill [spray bottles]:**

[Remove]

1. Remove trigger sprayer-or-cap from empty bottle.

[Pour]

2. Unscrew cap on refill and pour contents directly into empty bottle.

[Use]

3. Replace trigger sprayer and use as you normally would -or- unscrew cap and transfer your trigger to this bottle.

Manufactured by: Vital Solutions, LLC, PO Box 9932, W. Palm Beach, FL 33419

Made in the USA (may include graphic of American flag)

(Formulated by Vital Solutions)



As seen on TV (

Customer Service: 1-800-303-5405. [www.vitaloxide.com](http://www.vitaloxide.com))

Visit us at-or- For MSDS information (*Insert company website*)



[Contains no CFC's or other ozone depleting substances( )]



[Steel Recycle when empty ( )]



[Carpet and Rug Institute Seal of Approval Pet Stain and Odor Cleaning Chemical ( )]

[[Use your phone to] go here -and/or- scan [[the] tag -or- [this] code] to learn -or- get -or- see [more] uses ~or" information [on how-to-use [This Product]] -or [how-to] tips -or- [how-to [-use]] videos]



{No rinse required for food-contact surfaces (D-2)}

EPA Reg. No. 82972-1 EPA Est. No. 85804-NC-1 EPA Est. No. 29909-CA-1 EPA Est. No. 58455-IN-1

EPA Est. No. 71681-IL-1 (See batch code for actual establishment number) NOTICE: Seller expressly warrants that the product conforms to its chemical description. There are no other warranties associated

with the sale of this product.

**[GUARANTEE –If you are not satisfied with this product for any reason, send your written request for a refund and your reason for the return to the address below, together with the original dated store receipt showing the price you paid. Please allow 6-8 weeks for processing.]**

**[Questions or Comments? Call 1-800-645-5154 or visit our website at [www.natures-miracle.com](http://www.natures-miracle.com)]**

**DIRECTIONS FOR USE:**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Test fabric for color fastness. Contains a dilute oxidizing agent. Do not mix with vinegar or acidic cleaners.

{Always refer to manufacturer's care instructions before using equipment or devices}

**Pre-cleaning Instructions:** Remove visible soil by cleaning. Spray product straight onto soils, scrub and wipe clean with a dry paper towel or cloth. For cleaning floors add one cup product per gallon of water in bucket and clean with sponge, mop, or pad.

**Cleaning and General Claims:**

To Clean [Nonporous] Surfaces -and/or- Floors dog crates and litter boxes: Spray soiled area, then wipe clean, -or- For spot cleaning, spray and wipe clean with damp sponge -or- mop or cloth.

For hard to reach areas, apply electrostatic, compression sprayer or misting device.

To Spot Clean Carpet: Spray on soiled area until wet. Gently blot area with a clean, damp, color safe cloth. Repeat as needed for (for stubborn stains). Let air dry.

To Use as a Pre-Spray (Pre-Cleaner) on Carpet. Spray a light even coating over the soiled area (until wet).

**CLEANING MOLDS and MILDEWS on Carpet:**

Successful treatment of carpet and textiles requires that cleaning removes sufficient visible mold growth and that the material can be thoroughly moistened by the product. Mold infested carpets and textiles are difficult to adequately clean If carpet or textile is not readily accessible for application of product to obtain thorough wetting the carpet or textile must be removed and discarded in a manner consistent with application regulations and instructions.

**Cleaning Methods:**

For small spots of mold growth, apply product by cloth, hand-spray, electric or compression sprayer, paintbrush, roller, immersion, wipe, brush, sponge or use extraction device with undiluted product to remove mold growth. Dry carpet within 24 hours to eliminate conditions favorable to mold growth. To assist the drying process, the use of fans, dehumidifiers, heaters or other methods of ventilation are encouraged. Please consult with your local county extension office or EPA, ([www.epa.gov/mold/moldresources.html](http://www.epa.gov/mold/moldresources.html)) for more information.

After through drying, the carpet or textile should be vacuumed thoroughly, and the vacuum cleaner bag discarded in a well seal plastic bag or container, if a bagless vacuum is used spray container with undiluted product and let stand for 10 minutes.

After a flood or water damage, vacuum or extract as much water as possible before application. Apply full strength with sprayer until moist to carpet nap and rake or brush in. Allow to remain until dry. For best results carpets should be cleaned before application.

**SPONGES** To [prevent] [stop] [control] the growth of odor-causing bacteria [in your] sponge[s], spray sponge [with this product] until saturated and let stand 5 minutes.

### **Cleaning and General Claims:**

- 100% biodegradable surfactant
- 7 in 1 Cleaner Technology
- A shining [pure] clean you can see/trust
- [Available in] Economical refill
- Bathrooms, sinks and faucets and floor areas
- Brightens
- Cleans
- Cleans bathroom soils
- Cleans blood stains
- Cleans everyday messes
- Cleans fingerprints
- Cleans food stains
- Cleans rust
- Cleans to a shine
- Cleans [up] grease and grime
- Cleans away allergens and odor
- Clear drying
- Compatible with equipment surfaces
- [Compatible with -or- Suitable] [for use on] equipment surfaces
- Compatible with -or- Suitable –or compatible with equipment surfaces for use on hospital surfaces
- Complies with VOC laws
- Cuts -and/or- removes grease -and/or grime -and/or- sweat
- Cuts cleaning time
- Designed -or- Ideal for daily [cleaning] [use]
- Easy [cleaning]
- Effective [cleaner -or- cleaning] [formula]
- Fecal matter
- For a cleaner, fresher household
- For direct application
- In testing per Boeing D6-7127Revision P specifications, product conformed to specified tests conducted.
- For easy cleaning
- For terminal cleaning
- Good for use with microfiber cloths
- Great for Kitchen[s] -and/or- bathroom[s] [too]
- Ideal for use in gyms -and/or- health clubs -and/or- wellness centers
- Cleans beyond the surface
- For a deep clean
- Get a true clean (with) (this product)
- Okay (suitable) to use daily
- (Okay) (suitable) for daily use
- (Okay) (suitable) for weekly use
- (Okay) (suitable) for monthly use
- (Okay) (suitable) for regular use
- (Okay) for everyday use
- Great (cleaning) on your carpet
- (Money back) (Satisfaction) (Guarantee) (or your

- Ideal for use in schools -and/or- daycare -and/or- universities -and/or- colleges -and/or- offices
- Ideal for use on high touch surfaces
- Just spray[,] [and] wipe [and you're done]
- Labor saving no-rinse formula
- Makes cleaning easier
- Multi surface cleaner
- No added [perfumes] [and] [or] [dyes] [and] [or] fragrance
- No fragrance added
- Fresh Scent
- Clean Scent
- No harsh chemical fumes -or- smell –or odor -and/or- build-up -and/or- residue
- No phosphates
- No rinsing
- No sticky or dulling residue on hard floors
- No sticky residue on carpets
- No VOCs
- Non-abrasive
- Non-corrosive
- Packaging made with [x%] recycled –or recyclable plastic
- Pleasant smell
- Proof is in the clean
- Removes dried on [blood] stains
- Smell of clean
- Will not harm most hard, nonporous surfaces
- Will not harm natural stones [Granite, Marble, Travertine]
- Fast & effective cleaning (for pet accidents)
- For a cleaner, fresher household
- Effectively (removes) (eliminates) tough (dirt) (stains) (spots) (and) (grime)
- Spot treatment for (pet stains and odors) (insert usage site)
- Cleans tough (pet spots) (spots) (and) (pet stains) (stains) (removes) (eliminates) (tough) (dirt) (and) (stains) (pet stains)
- X5 Concentrate
- X9 Concentrate
- Removes dirt, dust, and common allergens(\*\*Cockroach, Dust mite and Pet dander)\_ from (insert usage site)
- Cleans everyday (pet) messes
- Fast and effective cleaning
- Low-Streak -or- Low-Residue -or- Low-Film -or- No-Film -or- Clear-Drying -or- Fast drying] [Formula] [for] [Shiny -or- Multiple Surfaces]
- A new technology that is [gentle] [mild] enough to use around your family...on the surfaces they touch the most
- Contains no [artificial] [fragrances] [or] [dyes]

<p>money back) (or its) (yours) (free)</p> <ul style="list-style-type: none"> <li>• Guaranteed to remove stains &amp; odors or your money back</li> <li>• Satisfaction guaranteed or your money back</li> <li>• No Fragrance added formula does not require rinsing</li> <li>• Leaves no [harmful] [chemical] residue</li> <li>• Safe for surfaces that water won't harm</li> <li>• [Gentle] [mild] enough to use on all kitchen surfaces</li> <li>• [Gentle] [mild] enough to use without gloves</li> <li>• Great for [daycare] [lavatory] [restaurant] [office] [school] use!</li> <li>• Does not cause damage to device glass, touchscreen glass or surfaces, keyboards, computer terminals</li> <li>• Use to keep (pet cages) (dog crates) (cat crates) (pet areas) clean</li> <li>• Worry free use in (kennels) (litter box) (pet areas)</li> <li>• Worry Free Use On Toys</li> <li>• Eliminates tough dog messes</li> <li>• Eliminates dog odors caused by bacteria</li> <li>• Eliminates tough cat messes</li> <li>• Eliminates cat odors caused by bacteria</li> <li>• Spot remover</li> <li>• Guaranteed to work or your money back</li> </ul> <p>[Brand Name]the toughest pet stain &amp; odor removing brand you trust... because it works!</p> <ul style="list-style-type: none"> <li>• When used with [the] [insert applicator/sprayer name]: use 65% less solution than a trigger sprayer</li> <li>• When used with [the] [insert applicator/sprayer name]: 70% faster application than a trigger sprayer</li> <li>• When used with [the] [insert applicator/sprayer name] covers YY where YY (9000 ft<sup>2</sup> ) (8000 ft<sup>2</sup> ) (1000 ft<sup>2</sup> ) with a single bottle</li> <li>• Approved for [use in] [the] [insert applicator/sprayer name] [System]</li> </ul>	<ul style="list-style-type: none"> <li>• [Contains] no [harsh] [harmful] [lingering] [cleaning] chemicals</li> <li>• [Controls] [prevents] [stops] the growth of odor-causing bacteria in sponges</li> <li>• Deodorizes sponges</li> <li>• For a cleaner, fresher [bathroom] [kitchen] [home] [house]</li> <li>• [Gentle] [mild] enough to use around [children] [kids] [babies] [your family] [food] [pets] [dogs] [cats]</li> <li>• Great for cleaning [all around] [the] [house] [home] [kitchen]</li> <li>• Great for cleaning just spray [and] [wipe] [walk away] [no rinsing -or- wiping [is] necessary]</li> <li>• Spray on pet chew toys, no rinse required</li> <li>• Reduces the spread of germs on treated surfaces</li> <li>• Spray on animal chew toys</li> <li>• No worries about pet licking after cleaning</li> <li>• Worry Free Use in Nursery</li> <li>• Tough on dog urine, feces, vomit, drool and other stains and odors</li> <li>• Tough on cat urine, feces, vomit, drool, hairballs and other organic stains and odors</li> <li>• For use on carpets, floors, furniture, fabrics, litter boxes and more</li> <li>• Spot remover</li> <li>• Tough on litter box stains and odors [messes]</li> <li>• Maximum Cleaning, Minimum Effort</li> <li>• Multi-Surface Formula</li> <li>• Cost effective and Time Efficient when used with [the] [insert applicator/sprayer name]</li> <li>• Prevents the growth of odor-causing bacteria</li> </ul>
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### Deodorization:

**To Deodorize:** Product works by oxidation, not by masking of odors. Eliminates odors caused by fire smoke, tobacco smoke, musty odors, stale-cooking odors. Simply spray, fog, or wipe on full strength and let air dry. When fogging to deodorize apply 1 quart per 2000 cubic ft. following fogger manufacturer's directions for use. Product must come into contact with the cause of the odor to be effective. For pet urine stains in carpet, blot urine as dry as possible then saturate stain with Product through carpet pad.

To DEODORIZE HVAC System Ductwork: Spray Product into system intake vents while system fan is running. Allow enough spray time for Product to contact air duct system surfaces, Repeat application as necessary.

To Deodorize or Freshen Carpet: Spray until slightly damp to eliminate (pet) odors. Product must come in contact with the cause of the odor to be effective.

<p><b>Claims:</b></p> <ul style="list-style-type: none"> <li>• HEAVY DUTY ODOR ELIMINATOR</li> <li>• Fragrance free</li> <li>• Contains no heavy metal, optical brighteners or dyes</li> <li>• Deodorizes [-and/or- disinfects -or- helps deodorize]</li> <li>• Deodorizer [for institutional use]</li> <li>• Deodorizes food odors [like garlic and onion] [left behind on kitchen surfaces] [after cooking]</li> <li>• Eliminates mold odors</li> <li>• Eliminates odors caused by bacteria [and non-fresh foods]</li> <li>• Eliminates -or- reduces [kitchen] odors [in the trash can –or recycling bin odors -or- smells] [caused by bacteria]</li> <li>• Eliminates pet odors caused by bacteria</li> <li>• Eliminates tough odors</li> <li>• Kills odor-causing bacteria in the kitchen -or- bathroom</li> <li>• Kills odor-causing bacteria</li> <li>• Kills -or- eliminates bacteria that cause [bad] odors</li> <li>• Odor eliminator</li> <li>• Removes -or- eliminates odors</li> <li>• Strong cat odors</li> <li>• Strong pet odors</li> <li>• [This effective product] eliminates odors at their source. [Does not just mask odors.]</li> <li>• Deodorizes areas that are hard to keep fresh smelling</li> <li>• Use to control odors animal kennels</li> <li>• Use to control odors barn stalls.</li> <li>• Eliminates urine and other strong pet odors {cat} {dog}</li> <li>• Eliminates pet odors</li> <li>• Pet waste odors</li> <li>• Cat Urine</li> <li>• Fecal Odors</li> <li>• Eliminates strong ammonia odors</li> <li>• Eliminates strong sulfur odors</li> <li>• Heavy duty odor eliminator removes strong, deep set pet odors</li> <li>• Deodorizes as it cleans</li> </ul>	<p><b>Deodorizations by air claims:</b></p> <ul style="list-style-type: none"> <li>• Air odor (eliminator) (deodorizer) (fighter)</li> <li>• Controls odors in the air</li> <li>• Controls (the toughest) (tough) (kitchen) (and) (bathroom) (pet) odors (in the air)</li> <li>• Deodorizes (the air) with a (new) (fresh) (pleasant) (clean) fragrance</li> <li>• Eliminates (pet) (food) (bad) odors (in the air)</li> <li>• Fights odors in the air</li> <li>• Gets rid of odors in the air</li> <li>• It's ok to spray (to deodorize) (eliminate odors) (make your home smell fresh and clean)</li> <li>• Leaves your home smelling clean and fresh</li> <li>• Leaves your home (air) smelling clean (and fresh)</li> <li>• Leaves a fresh clean scent</li> <li>• Long lasting freshness</li> <li>• (Now) Freshens (deodorizes) (the air)</li> <li>• (Now) Freshens (deodorizes) (the air) and kills (odor) bacteria on surfaces</li> <li>• Odor (fighter) (eliminator) (elimination) (for the air)</li> <li>• Perfect for eliminating your toughest odors (in the air)</li> </ul>
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<p><b>Allergen Removal:</b></p> <p>To [clean and] reduce specified allergens: [Set trigger to SPRAY.] Spray, [wait 1 minute]., and wipe excess. [Rinse.] Allow to air dry. [If streaking is observed, wipe with a clean, damp [cloth or] paper towel.]</p> <p><b>Allergens:</b></p> <ul style="list-style-type: none"> <li>• Cockroach matter -or- particles</li> <li>• Dust mite matter -or- particles</li> <li>• Pet dander -or- dog and cat dander</li> </ul> <p><b>Claims:</b></p> <ul style="list-style-type: none"> <li>• Reduces dust mite matter -or- particles, cockroach matter –or particles, and pet dander allergens</li> </ul>
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- Reduces Allergens[!])
- Removes Allergens
- Removes allergen from your home
- Cockroach matter -or- particles
- Dust mite matter -or- particles
- Pet dander -or- dog and cat dander
- Reduces allergy-causing particles, such as pet dander, and dust mite matter
- No rinse Pet dander -or- dog and cat dander eliminator

### **Fungicide:**

**To Kill Fungus on hard, non-porous surfaces:** Remove visible surface dirt by cleaning. [apply] [spray] [mist] product to the surface until thoroughly wet for 10 minutes. Re-apply when cleaning or when new growth appears.

For effective control of the fungus *Trichophyton interdigitale*, the surface must be completely wet with product for 10 minutes.

### **MILDEWSTAT:**

**For Mold or Mildew on Floors, Walls, Ceilings & Fabric:** Remove as much surface dirt, mold, or mildew as possible by cleaning. Then spray on product [from a distance of 12 inches] until visibly wet and let air dry, the surface must be completely wet with product for 10 minutes.

### **TREATMENT TO [INHIBIT][CONTROL][PREVENT][STOP] MOLD:**

#### **DIRECTIONS FOR USE:**

Product can be used as part of a comprehensive mold remediation or water damage restoration program, including [this should also include]:

For use on hard, non-porous surfaces: Surfaces treated must be completely wet with product for 10 minutes. Monitoring for conditions favorable to mold growth such as [moisture ingress] [water leaks] and high relative humidity. Eliminating conditions favorable to mold growth. Drying affected areas to below 20% moisture content. [Product must come in direct contact with mold to be effective.] When water damage is suspected, first eliminate the water source. Next, remove excess water and dry surfaces thoroughly. Product can be used on materials removed for disposal. If excess water is removed within 24 hours [and surface is thoroughly dried], spraying affected surfaces, with Product will [inhibit] growth. [Structural members and/or contents] [Building materials] exposed to water in excess of 24 hours may have extensive microbial growth that is not visible. Prepare a complete assessment and remediation plan to incorporate Product use.

Recommended Mold and Mildew Remediation Websites

IAQA —Indoor Air Quality Association ([www.iaqa.org](http://www.iaqa.org))

EPA – Environmental Protection Agency ([www.epa.gov](http://www.epa.gov))

New York City "Guidelines on Assessment and Remediation of Fungi in Indoor Environments" ([www.nyc.gov](http://www.nyc.gov))

IICRC - Institute of Inspection, Cleaning and Restoration Certification ([www.iicrc.org](http://www.iicrc.org))

[Standard and Reference Guide for Professional Water Damage Restoration" (IICRC S500) published by the Institute of Inspection, Cleaning and Restoration Certification ([www.iicrc.org](http://www.iicrc.org))]

(1) Remove heavy soil. [Clean surface soil from contaminated area with Product.] [For best results, [and to avoid possible interference from other chemicals,] use Product for initial cleaning.] [Use a cleaning tool (cloth, cleaning pad) suitable for the surface being cleaned.] [Remove as much dirt and mold as possible][and ensure surface is thoroughly dried.] [In some cases, staining may be irreversible.] [[Do not expect] Product [to] [will not] whiten stains [on contact].]

[2)] Refer to the Preventative Treatment section for application.

[{The following steps may be inserted in place of step 2}

[2)] Apply Product on area until evenly wet.

[3)] [[If desired] [If dry time][If water staining] [is a] [potential] [concern] [To promote drying] [and to

avoid residue marks], [use a] [clean cloth] [or] [paper towel] [to] wipe off excess wetness.][with a clean cloth or paper towel.]

[4)] [Allow treated surfaces to dry completely.]

[Remove heavy soil prior to application] [Mold stains may remain visible following treatment] [This is normal] [In this case] [If so] [If mold stains remain] [following treatment] [reapply] [product] [and] [wipe] [or] [scrub] [area] [away stains] [In some cases, staining may be irreversible.] [[Do not expect] Product [to] [will not] whiten stains [on contact]] [If, [following treatment], additional steps are taken to [remove] [or] [cover] [address] [treat] the stain, reapply Product as a final step [per Preventative Treatment section] to protect area from regrowth.]

#### Large Areas - Total Surface Area Affected Greater Than 30 Square Feet

Areas larger than 30 square feet require special procedures and individuals trained in remediation. Refer to the recommended websites for guidelines on remediation. Before using Product to mitigate large areas, you should understand one or more of these guidelines. Follow these guidelines to apply Product.

[When water damage is suspected, first find the source of water and eliminate it. Next, remove excess water [and surface thoroughly dried] [and thoroughly dry surfaces]. See IICRCS500 (Recommended Websites) for guidance on water removal. If excess water is removed within 24 hours [and surface thoroughly dried], spraying affected surfaces with Product will [inhibit] [prevent] growth.]

[[Structural members and/or contents] [Building materials] exposed to water in excess of 24 hours may have extensive microbial growth that is not visible. Prepare a complete assessment and remediation plan to incorporate Product use, provide for user and occupant safety and to document and monitor the remediation process. Product can be used on materials removed for disposal and in other applications where antimicrobial use is indicated.

#### REAPPLICATION:

Reapply weekly or when growth or odor reappears. Determine and correct the cause of re-growth [and ensure the surface has been thoroughly dried] before reapplication. Reapply [Product] if surfaces are washed or painted.

[Reapply weekly on hard surfaces and [monthly] [every 28 days] on fabrics, or whenever [new growth] [mildew] [mold] [regrowth] appears.]

#### PERSONAL PROTECTION EQUIPMENT SUGGESTIONS FOR APPLICATORS

For areas less than 30 sq. feet, an N-95 respirator, gloves and goggles/eye protection are recommended to avoid mold or mold spore exposure. For areas greater than 30 sq. feet, use an N-95 respirator or half-face respirator with HEPA filter, disposable overalls, gloves and goggles/eye protection.

#### Mildewstat Claims:

MOLD & MILDEW [CONTROLLER][PREVENTER][INHIBITOR] *INHIBITS MOLD & MILDEW ON HARD SURFACES & FABRIC*

- [Inhibits] [Controls] mold -and/or- mildew
- Mold -or- mildew controller
- [This product] controls mold growth on hard and soft surfaces.
- This product inhibits growth of mold and mildew on surfaces
- [Control][Prevent][Inhibit] Mold and Mildew on Hard surfaces
- Inhibits [mold] [musty] odor [caused by mold and mildew]
- All in one cleaner, disinfectant, [and -or- &] mold growth inhibitor -or- blocker
- [Control][Prevent][Inhibit] and Keeps mold [& mildew] from growing for 1 week -or- 7 days -or- for up to -or- as long as 1 week -or- 7 days
- [Control][Prevent][Inhibit] and Keeps mold [& mildew] from growing for up to -or- as long as 4 weeks on soft surfaces-or- 3 weeks on soft surfaces -or- 2 weeks on soft surfaces-or-1 week-or- 7 days
- [Control][Prevent][Inhibit] and Keeps mold from[reappearing] [re-growing]as long as 4 weeks on soft surfaces -or- 3 weeks on soft surfaces -or- 2 weeks on soft surfaces -or-1 week-or- 7 days
- [Controls][Prevents][Inhibits] mold and mildew at its roots
- Actively combats the growth of mildew

**Fungicide Claims:**

- [Attacks][Controls] [Inhibits][Stops][fungus] *Trichophyton interdigitale* at its roots
- Gets into and [attack][control][inhibit][stop]fungus even in hard to clean places –
- [Kills][Controls][Inhibits][Stops][fungus] *Trichophyton interdigitale* at its roots
- [Kills][Control][Inhibit][Stop][fungus] *Trichophyton interdigitale* in hard to clean areas [places] [such as caulking, corners, crevices, cracks)
- Penetrates to [kill][control][inhibit][stop]and destroy tough[fungus] *Trichophyton interdigital*-and bacteria at its source
- Penetrates to [kill][control][inhibit][stop][fungus] *Trichophyton interdigitale* in hard to clean places
- All in one cleaner, disinfectant, fungus [controller][inhibitor]
- [Control][Inhibit][Stop] 99.9% of [fungus] *Trichophyton interdigitale* and keeps -or- inhibits it -or- growth from coming back [for 1 week-or-7days] -or- [up to-or- as long as 1 week-or- 7 days].

**HVAC:****DIRECTIONS FOR USE: FOR ANTIMICROBIAL CONTROL IN HVAC SYSTEMS AND AIR DUCTS (INCLUDING ODOR CAUSING BACTERIA, MOLD FUNGUS AND ODOR-CAUSING FUNGI)**

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT  
IN A MANNER INCONSISTENT WITH ITS LABELING

THE PERSON APPLYING THIS PRODUCT IS RESPONSIBLE FOR FOLLOWING THESE  
DIRECTIONS UNDER BOTH STATE AND FEDERAL LAWS.

**1.0 General**

This Product is designed to be used as one component of a comprehensive HVAC and duct maintenance program. The purpose of such a program is to assure that the HVAC system and ducts function in the manner they were designed to, remain free from mold and other microbial growth and other contamination, and continue in that condition. This Product should only be used in only those cases where visible microbial growth has been detected in the system and then only after removing that growth and identifying and correcting the conditions that led to that growth. It may also be used to inhibit growth on surfaces that normally become wet during operation of the system. These normally include (but are not limited to) evaporator coils, uninsulated piping, condensate drain pans, drain lines, silicon caulks, mist eliminators and cabinet housing components subject to wetting by mist or carryover of water. If you need help in understanding any part of these instructions or have additional questions after reading these instructions, DO NOT APPLY THIS PRODUCT until you have received the answers for all of your questions.

**2.0 Inspection**

Prior to inspecting, cleaning, treating, repairing or otherwise working on the HVAC or duct section, the HVAC system should be turned off or the section under repair physically isolated from sections in active use. Prior to any application of PRODUCT the system must be inspected for cleanliness and mechanical condition. When initiating any measures to repair, clean or treat HVAC system components or air ducts, industry standards from the American Society of Heating and Refrigeration Engineers (ASHRAE), National Air Duct Cleaners Association (NADCA), Indoor Air Quality Association (IAQA) and other organizations must be followed. HVAC systems should be routinely inspected for cleanliness by visual means. The NADCA Standard, Assessment, Cleaning and Restoration of HVAC Systems (ACR 2002 or the latest revision), provides minimum recommended inspection frequency schedules for ducts and other system components. More information on NADCA standards can be obtained from the NADCA web site at [www.nadca.com](http://www.nadca.com).

**2.1 Cleanliness Inspection**

According to NADCA Standards, HVAC system cleaning must be performed when any of the following conditions are found in the cleanliness inspection. If any of these deficiencies are found during inspection,

cleaning in accordance with industry standards must be performed prior to the application of PRODUCT. At a minimum, these standards require removing all loose soil and debris with a HEPA filter equipped vacuum cleaner and complete cleaning of soil from all heat exchange surfaces using a special cleaner formulated so as to clean such soils effectively yet not damage heat exchange components or release unpleasant or potentially damaging fumes.

#### 2.1.1 Contamination

- HVAC systems should be operated in a clean condition. If significant accumulations of contaminants or debris are visually observed within the HVAC system, then cleaning is necessary. Likewise, if evidence of microbial growth is visually observed or confirmed by analytical methods, then cleaning is required.
- If the HVAC system discharges visible particulate into the occupied space, or a significant contribution of airborne particles from the HVAC system into the indoor ambient air is confirmed, then cleaning is necessary.
- Heat exchange coils, cooling coils, air flow control devices, filtration devices, and air-handling equipment determined to have restrictions, blockages, or contamination deposits that may cause system performance inefficiencies, air flow degradation, or that may significantly affect the design intent of the HVAC system, require cleaning.
- Drain pans must be free from slime and sludge or other contamination. Badly rusted or corroded drain pans must either be repaired or replaced.
- Fans and fan housings must be free from accumulations of microbial growth and particulate matter.
- Filters must be in good condition and cleaned or replaced as needed to avoid exceeding the allowable pressure drop for the equipment.

If you need help in understanding existing industry standards, consult a qualified professional or contact Customer Service at 1-800-303-5405 for guidance and further direction or consult the information at [www.epa.gov](http://www.epa.gov) (search on "HVAC Systems" or "air ducts"). In addition, the following association and society Internet sites should be consulted for information on standards and guidelines they have developed:

ACCA - [www.acca.org](http://www.acca.org)

ASHRAE - [www.ashrae.org](http://www.ashrae.org)

NADCA - [www.nadca.com](http://www.nadca.com)

NAIMA - [www.naima.org](http://www.naima.org)

SMACNA - [www.smacna.org](http://www.smacna.org)

#### 2.2 Mechanical Inspection

PRODUCT must be used only on HVAC system components and air ducts in sound mechanical condition as defined in 2.2.1 and 2.2.2 (below). The HVAC system components must be designed and installed in conformance with industry standards and guidelines. Prior to using the Product, inspect the HVAC system and ducts and assure that they are in sound mechanical condition. The following general guidelines, supplemented by industry standards from SMACNA, NAIMA, ASHRAE, ACCA and other organizations, must be followed:

##### 2.2.1 Air Leaks and Mechanical Defects

The equipment housing, cabinets and ducts must be free from air leaks and other mechanical defects. Air leaks will promote condensation of water that causes microbial growth and will lead to failure of PRODUCT to protect the system adequately.

##### 2.2.2 Design and Installation

ASHRAE, SMACNA, NAIMA and other industry organizations have established guidelines and standards for the design and installation of HVAC and duct systems. You should determine that the system components you wish to treat conform to industry practice. If you are not knowledgeable of industry guidelines and standards, consult a qualified professional or contact Customer Service at 1-800-303-5405 for assistance. In some situations, the inspection may reveal that a component of the HVAC or duct system is badly damaged or in such poor operating condition that it cannot be corrected through cleaning and/or minor repair. In these situations, the system should be replaced or rebuilt in conformity to the applicable industry standards prior to using PRODUCT. Some (but not all) of the conditions that would indicate the need for major repairs or replacement of the system include:

- Improper size of system or component - The system and all components must be sized to achieve correct airflow and be of the proper capacity for the load. When air-handling equipment is changed or new inlets or outlets added, the size of all components in the system should be recalculated and replacements made as needed.
- Physical damage - Crushed or physically damaged equipment may leak or fail to perform as designed. Deformed air ducts will restrict airflow and may leak (especially at joint areas). Damaged equipment must be repaired or replaced or if there is extensive damage, the entire system should be replaced.
- Badly corroded metal components including duct sections, housings and cabinets, coil assemblies, drain pans, fans and their housings and heat exchange surfaces.
- Loose, damaged, friable or missing insulation - Insulation is important in preventing moisture condensation and subsequent growth of mold and other organisms. If insulation (either interior or exterior) is damaged, missing or not properly fastened it must be repaired or replaced or the associated duct sections replaced. Air handler, mixing, and VAV box housings are also normally insulated and this insulation should be checked for damage in a like manner. Removed components that are contaminated with mold and other microbial growth may spread contamination while being removed from the building. To prevent this, smaller items should be placed in plastic bags that should then be sealed before being removed. Larger items that cannot be safely packaged should be treated before being moved through occupied spaces. An appropriately labeled disinfectant can be used during treatment. Care must be used during treatment to assure that fumes from the agent being used are not released into occupied spaces. Products used should be used according to their label directions. Please contact Customer Service at 1-800-303-5405 for guidance on the appropriate disinfectant to use for treatment.

3.0 General Directions for PRODUCT usage PRODUCT effectively controls by inhibiting growth of odor causing bacteria, fungi, and other odor, stain or damage causing organisms in HVAC system components and air ducts in residential, commercial, institutional, and industrial buildings. PRODUCT also eliminates odors associated with bacteria, mold, mildew, smoke, animals, cooking, spoilage, musty and other odors and removes odor-causing organisms when used as part of such a comprehensive preventative maintenance program in HVAC systems and air ducts. PRODUCT is a bacteriostat, fungistat (mold and mildew), mildewstat and deodorizer for use in residential, commercial and industrial settings. It will not stain or bleach materials or fabrics and will not harm or damage HVAC system components.

PRODUCT is formulated for use in all kinds of HVAC components and air ducts including:

- Furnaces.
- Air Handlers.
- Packaged units including Rooftops and Packaged Terminal Air Conditioner (PTAC) units.
- Fan coil units.
- Air distribution components such as air handlers, mixing boxes, transfer boxes, transitions, and turning vanes, dampers, fans and fan housings, and associated components.
- Condensate drain pans.
- Unlined sheet metal ducts.
- Air supply and return ducts and plenums fabricated with plywood, OSB or other wood like material.
- Flexible air ducts fabricated of metal or plastic.
- Humidifiers.
- Dehumidifiers; both Desiccant and Refrigerated.
- Registers, Grills and other air intake and discharge devices.

Follow the directions below for the specific type of duct or component being treated. It is vital that the following directions be carefully read and understood prior to using the Product. If you have any questions, need further information, require clarification, or do not understand any of the directions, call Customer Service at 1-800-303-5405 prior to use.

### 3.1 Application Instructions

Wet the surfaces with the spray, giving special attention to cracks and crevices.

[Product] will not stain any materials not stained by water] we suggest testing



for compatibility on surface of concern first. Allow ten to twenty minutes for drying. No rinsing or wiping is required. Following the elapsed drying time it is best practice to purge the system, by increasing the negative pressure through the outdoor exhaust or negative air machine or by turning on the vacuum used to pre-clean the HVAC system, while removing the duct openings seals. This will minimize the release of scent into the spaces served by the system.

### 3.2 Application Equipment and Devices

Refer to the precautionary statements for the Personal Protective Clothing and other special instructions that must be followed.

#### 3.2.1 Spray Applicators

Spray application is preferred on large surfaces that are easily accessible (such as plenums, coil assemblies, the interior of cabinets, housings with removable access panels, and in long runs of large diameter ducts). The spray equipment chosen should provide a consistent fine (1-300 micron) particle size and uniform spray pattern. Powered medium pressure sprayers are preferred. However, airless sprayers are suitable. Where airless sprayers are used, the most satisfactory spray pattern will be achieved using a 0.01 1" spray tip. For other brands and options contact Customer Service at 1-800-303-5405. Pump up garden type sprayers can be used but care must be taken to maintain maximum pressure by pumping frequently and the spray nozzle must be adjusted for the finest spray pattern possible. During application achieve complete uniform coverage. Avoid excessive wetting and do not allow the spray to run or pool.

#### 3.2.2 ULV or Mist Generating Sprayers

ULV or mist or other wet small particle application is preferable where surfaces are irregular or less accessible. Equipment capable of generating particles in the 15 to 60 micron range is most satisfactory. Avoid use of thermal type fog generators. Contact Customer Service at 1-800-303-5405 for information on other devices. Generally a fog will carry and provide adequate coverage up to 8 feet from the point of application so adequate penetrations must be cut in cabinets or ducts to assure complete coverage without over wetting. SMACNA, NADCA and NAIMA have established standards and guidelines for making and sealing openings in HVAC system components and ducts. Operators should be trained on proper application techniques as well as correct duct penetration and sealing procedures using these standards and guidelines. Operators should also carefully read and follow directions for the brand of equipment used. Customer Service personnel should be contacted at 1-800-303-5405 for information on training for using various types of equipment. Housing and duct penetrations should be properly closed following application, in accordance with industry standards.

#### 3.2.3 Automated Atomizing or Spray System

There are a number of automated spraying systems on the market including those that are carried by a "robot" through air ducts. These may provide an excellent option for application of PRODUCT in parts of air ducts that are difficult to access if they produce the correct spray pattern and application quantity. These devices must be visually monitored using video or other means while applying spray so proper application rate will be maintained. Please contact Customer Service at 1-800-303-5405 regarding a specific device should you have questions.

#### 3.2.4 Brush, Mop or Wipe Application

Brush, Mop or Wipe Application may be specified by some facility maintenance or remediation plans. These techniques are generally more labor intensive than other methods and are normally used only when specifications require. These methods are suitable only for smooth uniform surfaces. Do not use on porous or non-uniform surfaces. If in doubt about a given surface, contact Customer Service at 1-800-303-5405 before proceeding. When using brush or mop application, tools and materials used should be reserved only for application of PRODUCT, kept clean and protected between uses and replaced when worn or visibly soiled. Natural fiber brushes are preferred although any quality brush is acceptable. Mops should be of the types that leave minimal lint behind. Micro-fiber or other non-linting cloths are preferable. Where other types of cloths are used, they must be soft enough that they absorb a sufficient quantity of liquid to provide uniform application. During Brush, Mop or Wipe Application, the applicator must have access to the surfaces being treated. Usually this will require entering the component or air ducts. In such cases,

application must start from the point most distant from the point of entry. The applicator will then work from that point back to the entry point covering a 3-foot length of duct at a time. Apply to the top of the area to be treated first, followed by the sides then the floor. Overlap applications to assure complete coverage. Cover completely while avoiding runs or pooling.

### 3.3 Application Techniques

PRODUCT must be applied evenly to surfaces that are being treated. Even and uniform application is essential for satisfactory results. The procedures, equipment and techniques described below have been tested and provide the desired results. Other procedures, equipment or techniques may also achieve satisfactory results but should not be used without discussing the specific situation and equipment with a Customer Service Representative who can be reached toll free at 1-800-303-5405.

#### 3.3.1 Application from Exterior of the HVAC System or Air Duct

PRODUCT may be sprayed into existing access openings where these provide adequate access. Normally these consist of removable panels or access doors. Completely cover all nonelectrical components until they are thoroughly and uniformly covered using hand or powered spray equipment. This is the technique of choice for large penthouse or built up air handlers and other components with access panels or doors. When applying to ductwork, spray into openings at a minimum of every 8 feet. Existing supply openings can be used where they provide a clear view of the surfaces being sprayed so that uniform application can be achieved. However, additional penetrations will have to be made, as needed, so enough openings will be available to achieve total and uniform coverage.

Spray application is not an acceptable technique where openings are greater than 8 feet apart, additional openings cannot be made and properly sealed, and/or the duct geometry does not allow for uniform coverage. In such cases, application from within the HVAC system is necessary (see 3.3.2 below).

#### 3.3.2 Application from Within the HVAC System

When PRODUCT cannot be sprayed into openings at intervals throughout the HVAC or duct system, you must gain entry into the system and spray the Product onto interior surfaces until they are thoroughly and uniformly covered using hand or powered spray equipment. This is the most frequently used technique and is the technique of choice for air handlers, other components with access panels or doors and large diameter (generally 20" x 20" minimum) ducts where direct access can be gained to surfaces being treated. Some protection is provided for drain pans by excess PRODUCT that runs off of cooling coils when they are treated. Spraying PRODUCT, onto the surfaces of the pan or pouring into the drain pan until the bottom of the pan is uniformly wetted, can provide additional protection. Before treating the drain pan, check to determine that the drain line is clear and free running and that the drain pan is clean and free of loose corrosion. Replace badly deteriorated pans. Drain pans that do not drain completely and retain water may experience microbial growth even when treated. Level drain pans and otherwise adjust them so water completely drains from them.

### 3.4 Fans and Fan Housings

Fans create air turbulence, which can lead to condensation of water that supports mold and other growth. As a result, fan blade and blower wheel surfaces as well as associated housings are especially prone to fouling from both microbial growth and soil accumulation. It may be necessary to partially or completely remove and disassemble these components so they may be properly cleaned prior to application of PRODUCT. Complete cleaning must take place before attempting to treat these components.

#### 3.4.1 Humidifiers and Dehumidifiers

Because of the amount of water present, humidifiers and dehumidifiers are often sites especially prone to microbial growth. They also attract and hold soil as growth related contamination builds up over time. This accumulated material must be thoroughly removed prior to treatment with PRODUCT. For some units, cleaning may also signal the need to replace pads, belts, wheels or service other components. The manufacturer of the unit being maintained should be consulted on the proper maintenance and cleaning procedure.

#### 3.4.2 Rate of Application

The recommended rate of application for PRODUCT varies depending on the surface being treated. Users of this Product must carefully follow the rate of application instructions provided below:

#### 3.4.3 Bare Metal and Flexible Ducts

Apply until surface is evenly wet. Mist or wipe coverage 1,000 ft<sup>2</sup> per gallon. Spray coverage 500 ft<sup>2</sup> per gallon.

If the above application rates result in surface runoff or liquid pooling on the bottom of the duct, lower the application rate until the surface is thoroughly and evenly wet without runoff or pooling. The exception to this is when treating coil assemblies. In this case, the spray should be applied generously until there is runoff into the drain pan so as to penetrate the coil assembly to the greatest possible depth.

#### 3.4.4 Semi Porous Surfaces such as Concrete or Plaster

Apply until surface is evenly wet. Mist coverage 500 ft<sup>2</sup> per gallon. Wipe not recommended. Spray coverage 250-ft<sup>2</sup> per gallon. PRODUCT must penetrate into surface crevices and irregularities or it will not be effective. Inspect and assure that penetration is satisfactory. It may be helpful to apply half of the quantity needed for full coverage spraying from side to side then repeat the application moving the spray from top to bottom.

#### 3.5 Frequency of Application

Normally, infrequent application (every 3 months for HVAC Systems and every 6 months to every two years for air ducts) will provide effective control. Some critical applications such as HVAC and duct systems serving critical health care spaces or clean rooms where it is essential to minimize the generation of particulate matter that may be released as a by Product of microbial growth may require more frequent treatment. Do not apply more often than monthly and then only if there is evidence of re-growth. This Product must only be used in those cases where visible microbial growth has been detected in the system and then only after removing that growth and identifying and correcting the conditions that led to that growth. Prior to reapplication in such cases, investigate to determine the cause of re-growth and correct that problem prior to re-application. Before embarking on a program of frequent application (more frequent than every three months) contact Customer Service at 1-800-303-5405 and discuss the specific application and situation. Also make sure the reoccurrence of microbial growth does not have another cause such as persistently high humidity, standing water or hidden leaks.

Prior to reapplication, the interior of the ducts and other surfaces must be inspected and found to be free of accumulated soil. If soil or growth is found, the cause should be determined and corrected and then the ducts cleaned in accordance with accepted industry practice. If microbial growth persists in air ducts following application re-inspect for duct leaks, carryover of water from cooling coils or humidifiers and other sources of moisture promoting growth. Eliminate such sources of moisture before retreating.

#### 3.6 Returning the System to Operation following Application

Equipment being treated and the fans and blowers in the section of duct being treated must be turned off during application of PRODUCT. If the system cannot be shut down, the section of the system being treated must be isolated until treatment is complete. This will prevent the spray of fog from being blown away from the surface that is being treated.

Do not attempt to use the system fan or blower to carry PRODUCT to the surfaces within system. Such a practice will not result in uniform application of the Product to the surfaces being treated and will lead to ineffective control. Do not attempt this.

The system can be returned to full operation as soon as treatment is completed or at any time following completion of treatment. PRODUCT will dry on surfaces within 15 minutes following application. Extended drying time does not have an impact on effectiveness of treatment. PRODUCT should not be rinsed off following application so it will continue to inhibit the growth of microorganisms on treated surfaces.

When the above directions are followed properly, there will not be significant concentrations of Product



released to the spaces served by a system being treated. There is no need to have occupants leave the building during application.

[Reapply weekly on hard surfaces and [monthly] [every 28 days] on fabrics, or whenever [new growth] [mold][fungus] [regrowth] appears.] Allow product to dry completely.

### **Sanitization:**

**To Sanitize Non-food Contact Hard Non-porous Surfaces:** *Staphylococcus aureus* (ATCC 6538) and *Enterobacter aerogenes* (ATCC 13048) Mix 1 part product with 9 parts water. Apply product as a one-step cleaner sanitizer (5% organic soil load) by wetting thoroughly and let stand 5 minutes., wipe and allow to air dry. No rinse required.

**To Sanitize Hard Surface Flooring using a Device:** See Manufacturer's Instructions for Use.

**To Sanitize Food Contact Surfaces:** *Staphylococcus aureus* (ATCC 6538) and *Escherichia coli* (ATCC 11229) 99.999% sanitization of food contact surfaces. Mix 1 part product to 9 parts tap water. For all food contact surfaces, including glassware, utensils, cookware, and dishware: Scrape and pre-wash, then wash with a good detergent. Rinse with potable water, then sanitize by immersion in product for 1 minute (or longer if specified by government sanitary code). Place on a rack or drain board to air dry. Do not rinse or wipe. Food Contact Immobile Surfaces: (food processing equipment, counter tops, tables, appliances) Remove all gross food particles and soil by cleaning and rinse with potable water. Apply product by wetting thoroughly and let stand for 1 minute (or longer if specified by government sanitary code). Let surfaces drain and air dry. Do not rinse or wipe. Final Sanitizing Bottle Rinse: (Product) may be used as a final sanitizing rinse for returnable and nonreturnable bottles when diluted at the rate of 9 parts water to 1 part (Product).

**To Sanitize Soft Surfaces by Spot Treatment:**\* Fabrics\*: Hold bottle upright 6" - 8" from surface. Spray until fabric is wet. DO NOT SATURATE. Let stand [for] 5 minutes. Allow to air dry. [For difficult odors or heavy fabrics, repeat application.] [Reapply as necessary.] [Visible] soil must be removed prior to sanitizing.

**To Sanitize Carpet:** For synthetic carpet fibers such as nylon, olefin, or polypropylene – not intended for use on wool carpets. Test for color fastness in an inconspicuous area. Carpet should be clean or free of excessive soil before applying. Mix 1 part product to 5 parts water. Or use full strength. Apply at a rate of 2.5 oz per sq. ft. product must come into contact with contaminate to work. Allow to dwell for 10 minutes. Do not rinse, use an extraction wand and dry stroke carpet to remove excess moisture. Carpet can air dry or fans may be used if carpet needs to dry faster. (For use in extractor machines.)(Including Hoover carpet extractors).

**To use as a precleaner (pretreat) (& sanitize(r)) or postcleaner (posttreat) (& sanitize(r)) :** Spray a light even coating over soiled area (until wet). Allow to remain wet for 60 minutes (1 hour) (an hour). (Deep clean following your machine's guide.)

**To Sanitize Carpet using a Device:** See Manufacturer's Instructions for Use.

**To spot sanitize:** Spray a light even coating on area until wet. Allow to remain wet for 60 minutes (1 hour) (an hour). Let air dry. Vacuum.

**To spot clean & sanitize:** Spray a light even coating on soiled area (until wet). Allow to remain wet for 60 minutes (1 hour) (an hour). Gently blot area with a clean, damp, color-safe cloth. Repeat as needed (for stubborn stains). Let air dry. (Vacuum.) (Deep clean following your machine's guide.)

### **Sanitization Claims:**

#### **Food Contact Surfaces**

#### **Sanitization of food contact surfaces**

- Kills Harmful Bacteria
- Kills 99.999% of Bacteria on hard nonporous surfaces when food contact surface sanitization instructions are followed
- Leaves surfaces sanitized
- Sanitizes by killing [99.9% of] the bacteria [on hard, non-porous surfaces]
- Sanitizes [by killing Staphylococcus aureus on] hard, nonporous surfaces in 60 seconds
- Sanitizes hard, nonporous surfaces in 60 seconds when food contact surface sanitization instructions are followed
- The easy way to sanitize food service operations [dining areas, countertops, checkouts]
- [Kills] [eliminates] [destroys] [removes] 99.9% of bacteria, including E. coli and Salmonella, without leaving a harmful chemical residue
- While it's tough on bacteria, the solution is gentle to both hands and surfaces
- 60 seconds is all it takes to kill [99.999% of] bacteria
- [Kills] [Destroys] [Eliminates] 99.999% of bacteria on hard, nonporous surfaces in 60 seconds
- Kills 99.999% of Bacteria on hard nonporous surfaces

#### **Non-Food Contact Surfaces**

- Carpet Sanitization
- An effective non-food contact surface sanitizer
- Great for use as a non-food contact sanitizer in [insert use sites]]
- Kills Harmful Bacteria on hard and soft surfaces
- Kills 99.9% of Bacteria on carpet
- Leaves surfaces sanitized
- No pre-cleaning required
- One-step sanitizer when the use directions for non-food contact surface sanitization are followed
- One-step cleaner sanitizer when food contact surface sanitization instructions are followed
- Sanitize in one step sanitizer when food contact surface sanitization instructions are followed
- Sanitizes by killing [99.9% of] the bacteria [on hard, non-porous surfaces]
- Sanitizes hard, nonporous surfaces in 5 minutes
- Sanitizes fabrics by spot treatment, and hard surfaces
- Sanitizes hard and soft surfaces by spot treatment
- Sanitize soft surfaces by spot treatment [ including –or –on] and/or upholstery – and/or bedding – and/or curtains and/or sofas
- Use on [couches] [chairs] [blinds] [curtains] [and other soft surfaces]
- Sanitizer and odor neutralizer for soft surfaces by spot treatment – and/or hard surfaces
- [Kills] [eliminates] [destroys] [removes] 99.9% of bacteria, including E. coli and Salmonella, without leaving a harmful chemical residue
- While it's tough on bacteria, the solution is gentle to both hands and surfaces
- A proven sanitizer on soft surfaces by spot treatment
- An effective soft surface by spot treatment sanitizer
- Cost effective solution to sanitizing by spot treatment -or- dry cleaning hospital curtains
- Cost effective solution to sanitizing by spot treatment -or- laundering -or- dry cleaning hospital curtains
- Kills 99.9% of bacteria on soft surfaces by spot treatment -and/or- fabrics as a spot sanitizer
- The Smart way to clean and sanitize
- Effective in sanitizing your kitchen –and/or- bathroom surfaces
- Kills Harmful Bacteria on hard and soft surfaces by spot treatment
- Cleans up the pet mess and kills the germs on hard (nonporous) and soft surfaces by spot treatment

#### **Disinfection:**

##### **DIRECTIONS FOR USE:**

The following statement only to be used on institutional labels with medical use sites, medical devices

and/or blood borne pathogens:

CLEANING PROCEDURES: Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of this product

**This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization of high level disinfection.** \*\*This product is not to be used as a terminal sterilant/high level disinfectant on any surface of instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contact intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body.

SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATIONS AGAINST HIV-1, HBV, and HCV ON SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS

KILLS HIV-1, HBV, AND HCV ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS in health care settings or other settings in which there is expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids and surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS), Human Hepatitis B virus, and Human Hepatitis C Virus.

When handling items soiled with blood or bodily fluids use disposable latex gloves, gowns, masks, and eye coverings.

CLEANING PROCEDURES: Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of this product.

DISPOSAL OF INFECTIOUS MATERIALS: Blood and other body fluids should be autoclaved and disposed of according to Federal, State, and local regulations for infectious waste disposal.

CONTACT TIME: Allow surfaces to remain wet for 5 minutes for virus inactivation.

**TO PRE-CLEAN INSTRUMENTS PRIOR TO TERMINAL STERILIZATION/HIGH LEVEL DISINFECTION: AS A PRECLEANING SPRAY** - Place instruments into a suitable container. Spray this product undiluted onto instruments to thoroughly wet all surfaces. Let stand [for] up to 10 minutes]. Rinse instruments. A manual instrument cleaner - Thoroughly pre-rinse dirty instruments under running water to remove visible, gross debris. Immerse pre-rinsed instruments into an appropriate size container filled with this product. Scrub instruments using a stiff bristle brush until visibly clean. Submerge instruments while scrubbing. Rinse instruments thoroughly. Change solution daily. Follow with an appropriate disinfection process. Cleaning of critical and semi-critical devices must be followed by an appropriate terminal sterilization/high-level disinfection process.

**Hospitals/Healthcare facilities:**

This product [-or- product name] cleans, disinfects and deodorizes hard, nonporous [hospital] [medical] surfaces in one step [with no rinsing required].

This product [-or- product name] is a one-step [hospital-use] germicidal [disinfectant] cleaner and deodorant [odor counteractant] [odor neutralizer] designed for general cleaning, [and] disinfecting [deodorizing] [of] hard, nonporous inanimate surfaces when use-directions for disinfection are followed. Removes dirt, grime, fungus, mold, food residue, blood and other organic matter commonly found in hospitals [in health care facilities [on medical surfaces]. It [also] eliminates odors leaving [restroom] surfaces smelling clean and fresh. Use where odors are a problem.

**To Disinfect Farm Premises, Poultry Houses, Animal Pens & Vehicles:** Remove all animals and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks, and other feeding and water appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate all surfaces with product undiluted for a period of 10 minutes. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure. Allow to air dry. Ventilate buildings,

cars, boats, and other closed spaces. Drain any pooled product and/or rinse standing product with potable water. Do not house livestock or employ equipment until treatment has been absorbed, or dried.

**BOOT/SHOE WASH:** To prevent cross contamination into animal areas, shoe baths containing one inch of disinfecting solution must be placed at all entrances to building. Scrape waterproof shoes or boots and place in solution. Allow the solution to come in contact with the boot/shoe for 10 minutes. Change the disinfecting solution when solution becomes visibly dirty.

**Vehicles transporting animal feed, animal food, pet food, human food:**

Product can be used as a part of a FSMA regulations sanitary transportation practices for transporting human and animal food for sanitizing/disinfecting hard non-porous surfaces. Product to be used by shipper, receiver, loader or carriers transporting human and animal food on Transportation equipment includes bulk and non-bulk containers, bins, totes, pallets, pumps, fittings, hoses, gaskets, partitions, loading systems, and unloading systems. For disinfection allow surface to remain wet for 10 mins for sanitization 5 mins.

**To disinfect food processing premises:** floors, walls and storage areas, hold container six to eight inches from the surface to be treated and spray area until it is covered with the undiluted solution. Allow this product to penetrate and remain wet [for] [contact time listed [below] [or] [on label]] [10 minutes]]. Heavily soiled areas must be pre-cleaned before using this product. Food products and packaging materials must be removed or carefully protected prior to using this product.

**Disinfection of animal quarters and kennels:** For disinfection of pre-cleaned animal quarters and kennels, apply this product [-or- product name] undiluted. Remove all animals and feed from premises. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by animals. Empty all troughs, racks, and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate the surfaces with the undiluted disinfecting solution for contact time of 10 minutes. Ventilate building and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.

**To Clean and Disinfect in a Veterinary Application:** Use to clean and disinfect hard, nonporous surfaces such as feeding and watering equipment, cages, utensils, instruments, kennels, stables, catteries, etc. Remove all animals and feed from premises, animal transportation vehicles, crates, etc. Remove all litter, droppings, and manure from walls, floors, and surfaces of facilities occupied or traversed by animals. Empty all feeding and watering equipment. [Pre-clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with this product undiluted and let stand [for] 10 minutes. [To kill mold and fungi, let stand [for] 10 minutes] [at room temperature].] Ventilate buildings and other closed spaces. ]

**SPECIAL INSTRUCTIONS FOR CLEANING AND DISINFECTING AREAS WHICH ARE INFESTED BY RATS AND MICE AND MAY CONTAIN HANTAVIRUS:**

Disinfect Personal Protective gear upon removal at the end of the day. If the coveralls are not disposable, they must be laundered on site. If no laundry facilities are available, the coveralls must be immersed in liquid disinfectant until they can be washed.

All potential infective waste material (including respirator filter) from cleanup operations that cannot be burned or deep buried on site must be double bagged in appropriate plastic bags. The bagged material must then be labeled as infectious (if it is to be transported) and disposed of in accordance with local requirements for infectious waste.

Rodent droppings and visible dust can be reservoirs for Hantavirus. If you are cleaning out a building that has been closed up, such as a cabin, shed or garage:

1. Air out the building for at least 30 minutes by opening windows and doors.
2. Leave the building while it is airing out.
3. Do not vacuum, sweep or dust. This can spread the virus through the air.
4. Thoroughly wet the contaminated areas with the product undiluted and allow solution to stand undisturbed for 10 minutes.

Carefully remove contaminated material and dispose by burial or burning. Contact your local and state health department for additional disposal methods.

Treat the surface again following the label directions and allow solution to stand undisturbed for 10 minutes.

**TERRARIUM AND SMALL ANIMAL CAGE AND CAGE FURNITURE DISINFECTION FOR USE ON HARD NON-POROUS SURFACES:** {Animals frequently defecate on rocks and other hard, non-porous cage furniture items inside your terrarium. This can result in high bacteria and ammonia levels that can lead to possible infection/disease in your animals. When used regularly, this product can eliminate these high bacteria/ammonia levels in your cage and on your cage furniture items.}.

1. Remove all animals.
2. Thoroughly clean all surfaces and objects {caves, cage furniture, feeding and watering dishes, and appliances} including the substrate in the terrarium or cage with soap or detergent and rinse with water.
3. Saturate hard, non-porous surfaces {such as floors, walls, cages and other washable hard, non-porous surfaces} with product. So as to wet thoroughly.
4. Apply undiluted by cloth, mop, brush, sponge, auto scrubber, mechanical spray device, {hand pump} coarse pump or trigger spray device} or by immersion. Rub with brush, cloth, or sponge. For smaller surfaces, use a trigger spray bottle to spray surfaces with solution undiluted.
5. Allow surfaces to remain wet for a period of 10 minutes.
6. Saturate gravel as above and let stand for 10 minutes. Place in bucket of clean water and swirl for 15-30 seconds. Thoroughly air dry before returning to terrarium.
7. Thoroughly scrub all treated surfaces (except gravel) with soap or detergent and rinse with potable water before reuse.
8. Do not return animals to the habitat until it is dry and ventilated.
9. Clean terrarium at least once weekly or more as needed. Change cloth, sponge or towels frequently to avoid redeposition of soil.
10. Prepare a fresh solution daily or when visibly dirty.

Note: Substrates for desert terrariums (i.e. gravel) must be completely dry before returning to terrarium to avoid high humidity levels. Always replace substrate if a foul odor persists. Do not apply this product directly onto the small animal. If this product comes into contact with the small animal's skin, then immediately wash the material off of the animal with lukewarm water. If the small animal ingests this product, contact your veterinarian immediately.

**REPTILE TANK CLEANING AND DISINFECTION DIRECTIONS:** Remove all reptiles from the enclosure (tank) prior to cleaning and disinfecting. Remove all litter or droppings from surfaces. Empty all equipment used for feeding or watering reptiles. Thoroughly clean all surfaces with soap or detergent and rinse with water. Apply the product undiluted to the surfaces of the enclosure (tank) until thoroughly wet. Allow surfaces to remain wet for 10 minutes. Allow the enclosure (tank) to ventilate for a minimum of 10-15 minutes before replacing the reptiles

**Note:** Do not apply this product directly onto the reptile. If this product comes into contact with the reptile's skin, then immediately wash the material off of the animal with lukewarm water. If the reptile ingests this product, contact your veterinarian immediately.

**To Disinfect Hard Non-porous Surfaces:** For disinfecting pre-cleaned hard non-porous surfaces such as glass, plastic, painted wood, laminate, chrome, stainless steel, polyurethane coated hardwood floors, glazed ceramic tile, sealed concrete & linoleum floors. Types of items include: Exterior of appliances, bed frames, cabinet handles, wheelchairs, child car seats, counters, cribs, doorknobs, tables, tubs, exterior toilet surfaces, faucet handles, handrails, jungle gyms, keyboards, light switch covers, patio furniture, showers, sinks, stovetops, telephones, toys, walls, waste containers. Apply product undiluted full strength to pre-cleaned hard non-porous surfaces, wetting thoroughly with spray, sponge, mop, or by immersion in solution. Allow surfaces to remain wet for 5 minutes or 10 minutes for virus inactivation (refer to the viruses table for contact times) – 10 minutes for bacteria disinfection. For immersion, replace solution daily, or more frequently if it becomes significantly soiled or diluted **Fogging and Misting:** product can be applied by fogging or misting to disinfect hard, nonporous surfaces. Apply by fogging or misting until surface is moist using equipment manufacturer's directions for use. Remove or carefully protect all food and food packaging materials prior to treatment. Vacate treatment area and do not reenter treated area until



air is clear (minimum 20 minutes to reentry). For disinfection by ULV misting machine application, see the product Supplemental Bulletin specific for equipment to be used.

**To Disinfect Hard Non-porous Surfaces (tuberculocidal):** For disinfecting pre-cleaned hard non- porous surfaces such as glass, plastic, painted wood, laminate, chrome, stainless steel, polyurethane coated hardwood floors, glazed ceramic tile, sealed concrete & linoleum floors. Types of items include: Exterior of appliances, bed frames, cabinet handles, wheelchairs, child car seats, counters, cribs, doorknobs, tables, tubs, exterior toilet surfaces, faucet handles, handrails, jungle gyms, keyboards, light switch covers, patio furniture, showers, sinks, stovetops, telephones, toys, walls, waste containers. Apply product full strength to pre-cleaned hard non-porous surfaces, wetting thoroughly with spray, sponge, mop, or by immersion in solution. Allow surfaces to remain wet for 10 minutes for *Mycobacterium bovis*-BCG disinfection. For immersion replace solution daily, or more frequently if it becomes significantly soiled or diluted.

### Disinfectant Claims:

- Antibacterial [spray] [action] [formula]
- An effective disinfectant for use in the kitchen, bathroom, bedroom, and other areas
- Antibacterial [Formula] [disinfects]
- Antibacterial -or- germicidal [on hard, nonporous surfaces] [for kitchens and bathrooms]
- Antibacterial -or- germicidal [formula]
- Bactericidal
- [Bathroom][,] [and] [restroom][,] [and] [kitchen] disinfectant
- Broad spectrum -or- [residential][commercial][hospital] disinfectant
- Disinfectant
- Disinfectant [for institutional use]
- Disinfects & [and] Deodorizes
- Disinfects by killing microorganisms on hard, nonporous surface such as stainless steel, chrome, plastic, glazed ceramic, and mirrors.
- Disinfects as it Cleans
- Disinfects in one step
- Disinfecting spray
- Disinfect[s]
- Disinfects [to kill the germs]
- Disinfects [washable] kitchen surfaces including killing [99.9% of] germs -or- Disinfects [washable] kitchen surfaces including killing [99.9% of] bacteria -and/or- viruses\*\*-and/or- fungi -or- Disinfects [washable] kitchen surfaces including killing [99.9% of] bacterial[,] [and] viruses\*\*[,] [and] fungi
- Easily disinfect -or- Ready-to-use spray [to easily disinfect]
- For [hospital] [commercial] [industrial] [&] [institutional] use
- For Healthcare Facility use
- For Hospital use
- Germicidal
- Hard[, nonporous] surface disinfectant
- [Residential][Commercial][Hospital] disinfectant
- Kills [99.9% of] germs
- Kills [99.9% of] bacteria and viruses\*\* (on hard

- Just one step kills [99.9% of] bacteria
- Kills 19 -or- insert number smaller than 19 microorganisms
- Kills and cleans
- Kills -and/or- [removes] [99.9% of] bacteria - and/or- germs-and/or- viruses\*\* from toys
- Kills bacteria and viruses\*\*
- Kills Harmful Bacteria on hard
- Kills -and/or- [eliminates] [disinfects] [destroys] [removes][attacks] [gets rid of] 99.9% of bacteria - and/or- germs -and/or viruses\*\* on [use sites]
- One step cleaning and disinfecting
- [One-step] Disinfectant cleaner
- Oxidizing agent to provide disinfection
- Ready to use disinfectant cleaner
- Simply clean and disinfect in one step when the disinfection directions for use are followed
- Touch up cleaning/disinfection
- Tough on germs, easy on surfaces
- Tough on germs, easy to use around patient[s] [areas]
- Tough on germs, easy enough for everyday use
- Two in one, no sacrifice on cleaning and disinfecting when the directions for use for disinfection are followed
- Two in one, cleaning and disinfecting when the directions for use for disinfection are followed
- Use in places you are concerned about bacteria - and/or- viruses\*\*-and/or- germs
- Use -or- cleans and disinfects on healthcare surfaces
- Versatile cleaner disinfectant
- Virucide\*\* -or-Virucidal\*\*
- Kill[s] -and/or- eliminate[s] -and/or- disinfect[s] - and/or- destroy[s] - -and/or- attack[s] -and/or- get[s] rid of [99.9% of] [the] bacteria -and/or-[other] germs -and/or- virus[es]\*\* -and/or- *insert virus\*\*- and/or- bacteria from label* [commonly found in - or- on[*insert use site -or- use surface from this label*]
- Kill[s] -and/or- eliminate[s] -and/or- disinfect[s] - and/or- destroy[s] -and/or- attack[s] -and/or- get[s]

<p>surfaces)</p> <ul style="list-style-type: none"> <li>• Kills [99.9% of] [kitchen] [and] [bathroom] bacteria</li> <li>• Kills [99.9% of] insert organism from list -or- Kills of the following organisms insert organism from list</li> <li>• Kills bacteria -or- germs -or- viruses** on washable kitchen -and/or bathroom surfaces and fixtures</li> <li>• [Tough on germs,] easy -or- safe on [hard] [common] surfaces -or- <i>[insert use site -or- use surface from this label]</i></li> <li>• Disinfect. Carry On.</li> <li>• [One step disinfecting -and/or- deodorizing] (does not apply to Canine Parvovirus) [Disinfects -and/or- deodorizes] Anytime -or- Daily -or- Every day -or- In one easy step -or- Everywhere indicated on the label -or- Anywhere indicated on the label</li> <li>• [Kills] [Destroys] [Eliminates] 99.9% of dog viruses (canine parvovirus, canine coronavirus, canine distemper, infectious canine hepatitis) spread among pets through saliva, urine or feces.</li> <li>• [Kills] [Destroys] [Eliminates] 99.9% of cat viruses (Feline Coronavirus) spread among pets through saliva, urine or feces.</li> <li>• Meets OSHA Bloodborne Pathogen Standards for HIV-1, Hepatitis A, Hepatitis B, and Hepatitis C</li> <li>• The Smart way to clean and disinfect</li> <li>• No rinse disinfectant (that disinfects in one labor saving step</li> <li>• [Aquaculture][and/or][fish hatchery] staff disinfect [hard surfaces][nets][brushes][tanks][waders][dive suits][and/or][fish rearing equipment].</li> </ul>	<p>rid of 99.9% of cold viruses -and/or- [the] flu virus[es] -and/or- cold and flu virus[es] [commonly found in -or- on <i>[insert use site -or- use surface from this label]</i>]</p> <ul style="list-style-type: none"> <li>• Kill[s] -and/or- eliminate[s] -and/or- disinfect[s] -and/or- destroy[s] -and/or- attack[s] -and/or- get[s] rid of 99.9% of Norovirus -and/or- Influenza [which causes the flu ] -and/or- E. coli -and/or- Salmonella -and/or- Staphylococcus aureus] -and/or- Klebsiella pneumoniae -and/or- Respiratory Syncytial virus [(RSV)] [commonly found in -or- on <i>[insert use site -or- use surface from this label]</i>]</li> <li>• Cleans up the pet mess and kills the germs on hard (nonporous) surfaces</li> <li>• Cleans while it kills germs when the disinfection directions for use are followed</li> <li>• A combination disinfectant –and/or deodorizer and multipurpose cleaner</li> <li>• Antibacterial-and/or-Disinfectant and cleaning all in one</li> <li>• Disinfectant for [the] [insert applicator/sprayer name]</li> <li>• Disinfects 99.9% of germs when used with [the] [insert applicator/sprayer name]</li> <li>• Effective in disinfecting your kitchen –and/or- bathroom surfaces</li> <li>• [Sport Fishers] Disinfect [boats][fishing tackle][nets] and other fishing gear when moving between lakes and streams.</li> <li>• Reduce the spread of pathogens on treated surfaces at [Zoos] [Animal Shelters][Public Aquariums][facilities]</li> </ul>
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#### **Hard Surface Sanitization No Rinse Required: 60 sec contact time**

Escherichia coli (ATCC 11229)

Staphylococcus aureus (ATCC 6538)

#### **Non-Food Contact Surface Sanitization No Rinse Required: 5 minute contact time**

Escherichia coli (ATCC 11229)

Staphylococcus aureus (ATCC 6538)

#### **To Sanitize Soft Surfaces: 5 minute contact time**

S. aureus ATCC 6538

E. aerogenes ATCC 13048

#### **Carpet Sanitization: 60 Minute contact time**

Enterobacter aerogenes (ATCC 13048)

Staphylococcus aureus (ATCC 6538)

<b>Fungicide: 10 Minute contact time</b>
Trichophyton rubrum ATCC MYA
Trichophyton interdigitale ATCC 9533

<b>Mildewstat:10 Minute contact time</b>
Aspergillus niger ATCC 6275

<b>Disinfection Bacteria 10 minute contact time</b>
Pseudomonas aeruginosa ATCC 15442
Acinetobacter baumannii ATCC 19606
Staphylococcus aureus MRSA ATCC 33592
Listeria monocytogenes ATCC 15313
Legionella pneumophila ATCC 33153
Salmonella enterica ATCC 10708
Staphylococcus aureus ATCC 6538
Klebsiella pneumoniae (NDM-1) ATCC BAA-2146
Escherichia Coli ATCC 11229
Bordetella bronchiseptica ATCC 10580
Myobacterium bovis- BCG
Penicillin- Resistant Streptococcus pneumoniae, ATCC 700677
Chlamydia psittaci, Strain 6BC, ATCCVR-125

<b>***Disinfection Virus 5 minute contact time</b>
Rotavirus, Strain WA **
Hepatitis C Virus Bovine Viral Diarrhea Virus**
Hepatitis B Virus Duck Hepatitis**
Norovirus Feline Calicivirus**
Murine Norovirus (MNV-1)**
Swine Influenza (H1N1) **
Respiratory Syncytial virus, ATCC VR-26**
Human Immunodeficiency Virus (HIV Type 1) Strain HTLV-IIIb**
Influenza B Virus (Strain B/Taiwan/2/62), ATCC VR-1735**
Hepatitis A Virus ATCC VR-1541**
Hantavirus (Prospect Hill Virus) University of Ontario **
Canine Distemper Virus, Strain Snyder Hill, ATCC VR**

<b>***Disinfection Virus 10 minute contact time</b>
Adenovirus 1, Strain Adenoid 71, ATCC VR-1**
Canine Parvovirus, Strain Cornell-780916, ATCC VR-2016**
Canine adenovirus 1, Strain Utrecht, ATCC VR-293**
Feline Herpesvirus 1 Strain C-27, ATCC VR-636**
Feline coronavirus, Strain WSU 79-1683, ATCC VR 989**
Canine coronavirus Strain 1-71, ATCC VR-809**
Canine Influenza (H3N8) virus, Strain A/Ca/NY/105913/08, Cornell University**
Feline Infectious Peritonitis Virus, Strain: WSU 79, ATCC VR-990**
Feline panleukopenia virus, Strain Philips-Roxane, ATCC VR-648**
Rabies Virus, Strain: Flury (HEP), ATCC VR-139**
Avian Influenza(H5N1) Virus (NIBRG-14), CDC #2006719965, Charles River Laboratories
Herpes Simplex Virus 1 (Human), Strain HF, ATCC VR-260**
Porcine Epidemic Diarrhea Virus, Strain CO 2013, USDA APHIS 025-PDV001



# **AREAS OF USE INCLUDE:**

homes, vehicles, schools & daycare, gyms & locker rooms, sports gear, hospitals, nursing homes, laundry rooms, veterinary, pharmacies, ambulances, barber shops, laboratories, restaurants, boats, ships, federally inspected meat & poultry processing plants, farms, animal pens and poultry houses, egg processing premises, hatcheries, swine premise sanitation, refrigerated storage units (empty & disconnected), HVAC and AC systems, airplanes, trains, trucks, buses & automobiles. Use as a mold controller & mildewstat on hard non-porous surfaces (i.e, tiles) and soft surfaces (i.e, fabrics)”

## **Medical Use Sites:**

Ambulances -or- [Emergency Medical]  
Transport Vehicles  
Ambulatory Surgical Centers (ASC)  
Anesthesia Rooms or Areas  
[Assisted Living -or- Full Care] Nursing  
Homes  
Carts  
CAT Laboratories]  
Central Service Areas  
Central Supply Rooms -or- Areas  
Critical Care Units -or- CCUs  
Dialysis Clinics [Facilities]  
Doctors' Offices  
Donation Centers [blood] [plasma] [semen]  
[milk] [apheresis]  
Emergency Rooms -or- ERs  
Eye Surgical Centers  
Health Care Settings -or- Facilities  
Home Health Care Settings  
Hospital] Kitchens  
Hospices  
Hospitals  
Intensive Care Units -or- ICU[s] [areas]  
Isolation Areas  
Laundry Rooms  
Laboratories  
Long Term Care Facilities

[Medical] Clinics  
Medical Facilities  
Medical -or- Physician's -or- Doctor's Offices  
Newborn -or- Neonatal [Nurseries]  
[Intensive Care] Units [NICU]  
Nursing Homes  
Nursing -or- Nurses' Stations  
Operating Rooms  
Ophthalmic Offices  
Orthopedics  
Out-Patient [Surgical Centers (OPSC)]  
[Clinics] [Facilities]  
Patient Areas  
Patient Restrooms  
Patient Rooms  
[Pediatric] Examination Rooms -or-Areas  
Pediatric Intensive Care Units [PICU]  
Pharmacies  
Physical Therapy Rooms -or- Areas  
Physicians' Offices  
Psychiatric Facilities  
Radiology -or- X-Ray Rooms -or- Areas  
Recovery Rooms  
Rehabilitation Centers  
Respiratory Therapy Rooms -or- Areas  
Restrooms  
Surgery Rooms -or- Operating Rooms -or-  
ORs  
Waiting Rooms -or- Waiting Areas

## **Medical Use Surfaces:**

Hard, Nonporous Surfaces Associated with the  
Following:  
anesthesia machines  
aphaeresis machines  
autoclave exteriors  
bathroom doorknob  
bedpans  
bedrails  
[bedside] commodes  
bedside tables  
blood pressure cuffs  
blood pressure (BP) monitors]  
cabinet handles  
call boxes  
CAT -or- Computerized Axial

isolettes  
IV [stands] [pumps] [poles]  
large surfaces  
loupes  
mammography equipment]  
[Mayo] [instrument] stands  
medication carts  
mobile devices  
mobile workstations  
mouse pads  
MRI -or- Magnetic Resonance Imaging  
equipment  
nurse-call [devices] [buttons] [and  
cords]  
operating room tables and lights  
operatory light switches

<p>Tomography equipment) carts cellular phones charging stations closet handles coated mattresses coated pillows [computer] mice computer tables cords counters [crash] [emergency] carts desktops diagnostic equipment] dialysis machines] docking stations [exam -or- examination] tables exterior surfaces of air vents -or- air vent exteriors external surfaces of [medical] equipment -or- [medical] equipment surfaces [external] [surfaces of] ultrasound transducers [-and/or- probes]] exterior of pipes footboards glucometers gurneys [hard, nonporous] edges of privacy curtains hard, nonporous hospital -or- medical surfaces hard, nonporous surfaces headboards [hard, nonporous] high touch surfaces [hospital -or- patient] bed[s] [springs] [railings] [frames] [linings] infant incubators and care cribs infant warmers [inner] [inside of] drawers</p>	<p>oxygen hoods overbed tables paddles pagers] [patient] chairs patient monitoring equipment] patient support and delivery equipment] phlebotomy trays physical therapy (PT) equipment portable bathrooms prescription container exteriors pulse oximeters PVC tubing reception counters -or- desks -or- areas remote controls scales side rails slit lamps small surfaces spine backboards stethoscopes stools stretchers surfaces in and around toilets in patient rooms toilet handholds toilet[s] toilet rims -or- seats traction devices walls [around toilet] [in patient rooms] wash basins safety rails Hard non-porous whirlpool surfaces Wheelchairs <b>Medical Use Surfaces:</b> Soft Surfaces Curtains Bedding Sofa's Fabric's</p>
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#### **Dental Use Sites:**

Dental Offices Dental Operatories  
Examination Rooms Dental -or- Dentists' Offices

#### **Dental Surfaces:**

##### **Hard, Nonporous Surfaces Associated with the following:**

amalgamators-and/or-dental curing lights  
endodontic equipment such as apex locators  
pulp testers and motors  
dental countertops hard, nonporous dental reception counters -or- desks -or- areas  
dental operatory surfaces  
light lens covers

<p><b>Veterinary Use Sites:</b></p> <p>Use Sites:</p> <p>Animal [Pet] Housing [Kennels] [Facilities](Pens) (Cages)</p> <p>Animal Holding Areas</p> <p>Animal Life Science Laboratories</p> <p>[Animal -or- Pet] Grooming Facilities</p> <p>Animal Transportation Vehicles</p> <p>Breeding Establishments</p> <p>Dairy Farms</p> <p>Equine Farms</p> <p>Farms</p> <p>Kennels</p>	<p>Litter Boxes</p> <p>Livestock -and/or- Swine -and/or- Poultry Facilities</p> <p>Pet [Areas] [Quarters]</p> <p>Pet Shops -or- Stores</p> <p>Pet waters and feeders</p> <p>Small Animal Facilities</p> <p>Tack Shops</p> <p>Veterinary Clinics -or- Facilities</p> <p>Veterinary [Offices] [Waiting Rooms]</p> <p>Veterinary -or- Animal Hospitals</p> <p>Veterinary Examination Rooms</p> <p>Veterinary X-ray Rooms</p> <p>Veterinary Operating Rooms</p> <p>Zoos</p>
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<p><b>Veterinary Use Surfaces:</b></p> <p><b>Hard, Nonporous Surfaces Associated with the following:</b></p> <p>animal equipment</p> <p>automatic feeders</p> <p>cages</p> <p>surfaces of fountains</p> <p>exterior surfaces of watering appliances</p> <p>feed racks</p> <p>hard, nonporous veterinary surfaces</p> <p>pens</p> <p>reception counters -or- desks -or- areas</p> <p>stalls</p> <p>troughs</p> <p>veterinary care surfaces</p>
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**Food Service Use Sites:**

Banquet Halls  
Bars  
Cafeterias  
Catering Facilities  
Commercial -or- Institutional Kitchens  
Delis  
Fast Food Chains -or- Restaurants  
Food Preparation and Processing Areas School Kitchens  
Food [Service -or- Processing] Establishments  
Food Serving Areas  
Vending Machines  
Water Coolers  
Water fountains

**Food Service Surfaces:**

**Hard, Nonporous Surfaces Associated with the following:**

dish racks  
drain boards  
food cases  
food trays  
freezer exteriors  
hoods  
[kitchen] appliance exteriors  
microwave exteriors  
plastic -or- metal outdoor furniture  
refrigerator exteriors  
salad bar sneeze guards

<p><b>Miscellaneous/General Use Sites:</b> Airplanes [Airports] Ambulances Athletic [Recreational] Facilities Automobiles Barber Shops Basements Bathroom [s] Bathroom -or- Locker Room Facilities Beauty Salons Bedroom [s] Blood Banks Boat interiors Bowling Alleys Bus interiors Butcher Shops Cafeterias Camper interiors Car interiors Churches Colleges Convenience Stores Correctional Facilities Curtains</p>	<p>Garbage] [Waste] Storage Areas Living Room Locker Rooms Lodging Establishment Lounges Malls Manufacturing Plants -or- Facilities Markets Mass Merchandisers, Discount Retailers -and/or- General Merchandise Stores Mobile Homes Mortuaries Motels Motor Home Interiors Mudrooms Nurseries Office[s] [Buildings] Pet Animal Quarters Pet Areas Pet Crates Pet Carriers Pet Bedding Pet Car Seats Pet Feeders</p>	<p>Subways Supermarkets Tattoo Parlors Toolsheds Transportation Terminals Trains Trolleys Universities Upholstery Vacation Homes Warehouse Clubs [Pet][cat] [dog] Crates [pet] [cat] [dog] carriers</p>
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[Damp] Storage Areas Day Care Centers Den[s] Dining Room Dorms Dormitories Elevators Emergency Vehicles Factories Fast Food Restaurants [Food Processing] [Manufacturing] Plants Funeral Homes Gas Stations Grocery Stores Gymnasiums -or- Gyms Health Club[s] [Facilities] Home[s] Home Centers Hotels Industrial Facilities Institutional Kitchens [Institutional] Laundromats Institutions Kennels Kitchen[s] [Surfaces] Laboratories Laundromats Laundry Room[s]	Pet Water Dishes Dog Houses Dog Runs Pet Toys Litter Boxes Bird Cages Cage Accessories Feeder & waters Small animal cages Pharmacies Play Areas-or-Rooms [Police -and/or- Fire] Vehicles Produce Areas Public Facilities Public Restrooms Recreational Centers -or- Facilities Rental Cars Rest Stops Restroom[s] -or- Restroom Areas Retail Businesses School Buses Schools Shelters Ships Shopping Centers Shops Shower Rooms Sports Arenas -and/or- stadiums Storage Rooms -or- Areas	
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<b>Miscellaneous/General Surfaces:</b> <b>Hard, Nonporous Surfaces Associated with the following:</b> cabinet knobs appliance exteriors armchairs [baked] enamel Bassinets [bathroom] fixtures [bathroom] [kitchen] faucet[s] [handles] [bath]tubs bed frames behind and under counters behind and under sinks boat interiors booster chairs Box Springs brush handles burner trays Cabinets car interiors carts	exercise [machines] [equipment] exhaust fans exterior -or- external toilet surfaces exterior -or- external urinal surfaces faucets [filing] [medicine] cabinets free weights freezer exteriors furniture garage surfaces garbage-or-trash cans glazed ceramic [restroom surfaces] glazed [ceramic] tile[s] glazed porcelain [tiling -or- tile] grill surfaces [grocery [store] -or- supermarket] carts [handles] [child seats] gymnastic] equipment Hampers	stretchers synthetic marble tables [tabletops] [tiled] walls Tires [Exterior of toilet [flush]] [telephone][cabinet] [dishwasher][door] handles linoleum lockers metal metal blinds metal work benches microwave exterior office machinery office -or- bedroom -or- bedside furniture patio furniture pencil sharpeners pet areas -or- surfaces [plastic] fly swatters plastic laundry hampers -or- baskets plastic patio furniture -or- lawn chairs [plastic] shower curtains plastic surfaces associated with:
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chairs -or- arm chair [children's] furniture closets [clothes] [diaper] hampers coated ceilings cooler exteriors counters -or- countertops cupboards cribs crutches crystal (non-food contact areas) dashboard desk[s] [tops] diaper pails [dining] [fast food] [kitchen] [picnic] [play] [restaurant] [tray] [diaper -or- infant] [changing] [tables] -or- [areas] -or-[stations] dining room surfaces -and/or- tables-and/or-fast food restaurant tables door[s] [handle[s]] [frames]] Doorknobs Drawer pulls Dressing carts Elevator buttons Exercise balls Exercise bands	[hand]railings -or- rails hard, nonporous floors [around toilets] [hard] plastic -or- vinyl headsets helmets high chairs (non-food contact surfaces) [kids'] play [structures] [equipment] [furniture] [tables] [kitchen] appliance exteriors kitchen appliance exterior[s] [surfaces] light fixtures -or- switches -or- panels rocking chairs RV interiors sealed fiberglass shelves [and drawers] shin guards shopping carts shoulder pads shower[s] [area] [curtains] [doors] [stalls] [walls] signs sink[s] [basins] seats sports equipment stainless steel stall doors staplers steering wheel stools	floors, walls, Mirrors, toilets, urinals, sinks, shower rooms and locker rooms Playpens portable toilet exteriors range hoods recycling bins refrigerator exterior [door handles] tray tables tubs urinals vanity tops -or- vanities vehicle interiors vending machine surfaces [vinyl] linoleum -or- wallpaper Vinyl upholstery walkers walls wash basins [washable] kitchen[s] [surfaces] washers/dryers -or- washing machine exteriors] wastebaskets weight machines whirlpool tubs -and/or- Jacuzzis window [blinds] [shades] Window treatments windshields [wrestling] [exercise] mats Tools towel dispensers toy boxes-or-storage bins trailers Exterior of toilet [training] toilets trash cans -or- compactors
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<b>Miscellaneous/General Surfaces:</b> <b>Soft Surfaces for Spot Treatment Associated with the following:</b> Bathroom mats Car Seats Car Seat Upholstery Carpets couch(es) fabric gym bags Laundry Bags shoes Pillow(s) Upholstery uniforms Bedding (Bedspreads) Back Packs	Blankets (Comforters) Draperies Duvet Cover(s) Stuffed Animals
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<b>Horticultural and Botanical Use Sites:</b> Aeroponic growing facilities Aquaponic growing facilities Basement greenhouses Botanical bio-film [non-public health bio-film] Botanical facilities Commercial greenhouses Customer/public areas Employee areas including break	Floral shops Garden centers Hardscape storage areas Herbal dispensaries Hobby greenhouses Horticultural bio-film Horticultural facilities Hydroponic growing facilities Landscape nurseries Lawn and garden shops	Plant growing chambers Plant growing facilities Plant growing rooms Plant holding areas Plant nurseries Plant transport vehicles Plant storage areas Plant supply storage areas Plant warehouses Vendor delivery areas
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<b>Horticultural and Botanical Use Surfaces:</b> <b>Hard, Nonporous Surfaces Associated with the following:</b> Cash registers Compost bins Compost equipment Containers, buckets, pots, trays Display coolers Display shelving Germination stations Grafting stations Greenhouse equipment Greenhouse films Greenhouse irrigation systems	Greenhouse tools, scissors, and measuring cups Greenhouse ventilation/air handling systems Grow tents and nets Horticultural air exchangers Office equipment and/or machinery Plant benches Plant blankets Plant carts, wagons, wheelbarrows Plant coolers Plant display racks	Plant grow shelves Plant shelters Plant transport racks Pollination trays Produce/flower testers Propagation trays Row covers Shade materials Supply cupboards Supply shelving Transplant equipment [washable][surfaces]-and/or general merchandise
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<b>Aquaculture, Aquafarming Algaculture, Slaughterhouses Fisheries, Fish Farms, Shrimp Farms, Oyster Farms Use sties :</b> Well boats Work boat Deck Wells Equipment Pumps Boat hull Harvesting equipment Foot dips Diving teams Equipment Bins Lids Stacker Boxes Transport Tanks & Equipment Weight Equipment Tank Brushes Vaccination Equipment stage	Grading Equipment Boats Trailers Waders Sampling equipment Protective Clothing Diving Suit Equipment Mort Bags Hand Nets Dip Nets Nets
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